

**REMARKS / ARGUMENTS**

The present application includes pending claims 1-42. Claims 1-11, 14-38, 40, and 42 have been rejected. Claims 12-13, 39, and 41 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. The Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-3, 8-11, 14-15, 19-20, 31-38, 40, and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent № 7,130,576, issued to Gurantz, et al. (hereinafter, Gurantz), in view of US Publication No. 2003/0203743, issued to Sugar, et al. (hereinafter, Sugar). Claims 4-6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gurantz, in view of Sugar, further in view of U.S. Patent No. 6,256,493, issued to Dorenbosch, et al. (hereinafter, Dorenbosch). Claim 7 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gurantz, in view of Sugar, in view of Dorenbosch, and further in view of U.S. Patent No. 5,384,847, issued to Hendrickson, et al. (hereinafter, Hendrickson). Claims 16-18, 21-27 and 29-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Gurantz, in view of Sugar, further in view of U.S. Patent No. 6,445,907, issued to Middeke, et al. (hereinafter, Middeke). Claim 28 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Gurantz, in view of Sugar, further in view of U.S. Publication No. 2002/0024962, issued to Bauer (hereinafter, Bauer). The Applicant respectfully traverses these rejections

at least based on the following remarks.

### REJECTION UNDER 35 U.S.C. § 103

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure ("MPEP") states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

See MPEP at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added). Further, MPEP § 2143.01 states that "the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art suggests the desirability of the combination," and that "although a prior art device 'may be capable of being modified to run the way the apparatus is claimed, there must be a *suggestion or motivation in the reference* to do so'" (citing *In re Mills*, 916 F.2d 680, 16 USPQ 2d 1430 (Fed. Cir. 1990)). Moreover, MPEP § 2143.01 also states that the level of ordinary skill in the art cannot be relied upon to provide the suggestion..., citing *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999). Additionally, if a *prima*

*facie* case of obviousness is not established, the Applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

**I. The Proposed Combination of Gurantz and Sugar Does Not Render Claims 1-3, 8-11, 14-15, 19-20, 31-38, 40, and 42 Unpatentable**

The Applicant now turns to the rejection of claims 1-3, 8-11, 14-15, 19-20, 31-38, 40, and 42 as being unpatentable over Gurantz in view of Sugar. The Applicant notes that the proposed combination of Gurantz and Sugar forms the basis for all of the pending rejections.

Gurantz discloses a satellite receiving system, where "program channels are selected from one or more broadband signals and combined with other selected channels and transmitted from a first unit, for example an outdoor unit, to a second unit, for example a gateway, server, or set-top box, using a single cable." See Gurantz at Abstract.

Sugar discloses a MIMO wireless transceiver to support processing of multiple signals for simultaneous transmission via corresponding ones of a plurality of antennas and to support receive processing of multiple signals detected by corresponding ones of the plurality of antennas. See Sugar at Abstract.

**A. The Proposed Combination Does Not Teach or Suggest “a first satellite receiver demodulator integrated within said single integrated circuit chip ... and a second satellite receiver demodulator integrated within said single integrated circuit chip”**

With regard to the rejection of independent claim 1 under 35 U.S.C. § 103(a), the Applicant submits that the combination of Gurantz and Sugar does not disclose or suggest at least the limitation of “a first satellite receiver demodulator integrated within said single integrated circuit chip ... and at least a second satellite receiver demodulator integrated within said single integrated circuit chip,” as recited by the Applicant in independent claim 1.

The Examiner states the following in the Office Action:

As to claims 1, 31, 42, Gurantz teaches a system for an integrated set-top box, the system comprising: a first satellite receiver demodulator (see fig. 12, col. 10, lines 19-26); at least a second satellite receiver demodulator (see fig. 12, col. 10, lines 19-26); and at least one processor (see fig. 12, col. 10, lines 19-26). Gurantz fails to teach wherein the receivers are integrated within the single integrated circuit chip. Sugar teaches wherein the receivers are integrated within the single integrated circuit chip (see fig. 1, number 20, paragraph 034).

See the Office Action at page 2. The Applicant respectfully disagrees with the above argument, which relies on Figure 12 and the following citation of Gurantz:

Referring to FIG. 12, signal selector and combiner 1210 taps the signals output from each LNB to provide the transponder selection function. Switch 1220 is under control of the signal selector and combiner 1210. Switch 1220 will be actuated to supply either a conventional signal from multipoint switch 1260 or the composite

transponder signal from signal selector and combiner 1210. Switch 1220 can be a solid-state device or electromechanical relay.

See Gurantz, col. 10, lines 19-26. The Applicant points out that **Gurantz, including col. 10, lines 19-26, does not disclose a first and a second satellite receiver demodulator.** At the above citation (col. 10, lines 19-26), Gurantz discloses the communication of conventional signals, via the multipoint switch 1260, or composite transponder signals, via the signal selector and combiner 1210, to the three separate set-top boxes (STB). Furthermore, **Gurantz does not disclose or suggest a first satellite receiver demodulator and at least a second satellite receiver demodulator are integrated within a single integrated circuit chip**, as recited by the Applicant in claim 1. The Examiner also concedes at page 2 of the Office Action that "Gurantz fails to teach wherein the receivers are integrated within the single integrated circuit chip."

The Examiner then seeks support in Sugar and states the following:

Sugar teaches wherein the receivers are integrated within the single integrated circuit chip (see fig. 1, number 20, paragraph 034). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Sugar into the system of Sugar in order to provide significant cost and space/area savings.

See *id.* Initially, the Applicant points out that Sugar relates to the art of MIMO wireless radio transceivers and it does not on its face relate to satellite receivers, including satellite receiver demodulators. Therefore, **Gurantz and Sugar may not be properly combined** for purposes of a rejection under 35 U.S.C. § 103(a).

Referring to Figure 1 of Sugar, the reference allegedly discloses that the receiver circuits 20 and 30, as well as the transmitter circuits 40 and 60 may be implemented in a single integrated circuit in the radio transceiver 10. The Applicant points out, however, that Gurantz does not disclose a **first satellite receiver demodulator** and at least a **second satellite receiver demodulator** integrated within a single integrated circuit chip. Therefore, if the Examiner is relying for support on Sugar, then Sugar has to disclose the elements missing in Gurantz, namely, a **first satellite receiver demodulator** and at least a **second satellite receiver demodulator integrated within a single integrated circuit chip**. The Applicant respectfully submits that Sugar does not disclose this claim limitation. Even though Sugar discloses that the receiver circuits 20 and 30 may be implemented in a single integrated circuit, **Sugar is silent as to satellite receiver demodulators integrated within a single chip in the radio transceiver 10**. In fact, the Examiner is referred to Figure 11 and ¶ 0071 of Sugar where it may be clearly seen that **Sugar discloses only a single demodulator circuit 790, which resides outside of the RF transceiver 10 boundary.**

Therefore, the proposed combination of Gurantz and Sugar does not disclose or suggest "a first satellite receiver demodulator integrated within said single integrated circuit chip ... and at least a second satellite receiver demodulator integrated within said single integrated circuit chip," as recited by the

Applicant in independent claim 1. Accordingly, the proposed combination of Gurantz and Sugar does not render independent claim 1 unpatentable, and a *prima facie* case of obviousness has not been established. The Applicant submits that claim 1 is allowable. Independent claim 31 is similar in many respects to the system disclosed in independent claim 1. Therefore, the Applicant submits that independent claim 31 is also allowable over the references cited in the Office Action at least for the reasons stated above with regard to claim 1.

**B. Rejection of Dependent Claims 2-30 and 32-42**

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Gurantz in view of Sugar has been overcome and request that the rejection be withdrawn. Additionally, since the additional cited references (Dorenbosch, Hendrickson, Middeke, and Bauer) do not overcome the deficiencies of Gurantz and Sugar, claims 2-30 and 32-42 depend from independent claims 1 and 31, respectively, and are, consequently, also respectfully submitted to be allowable over the references cited in the Office Action.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-42.

**CONCLUSION**

Based on at least the foregoing, the Applicant believes that all claims 1-42 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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